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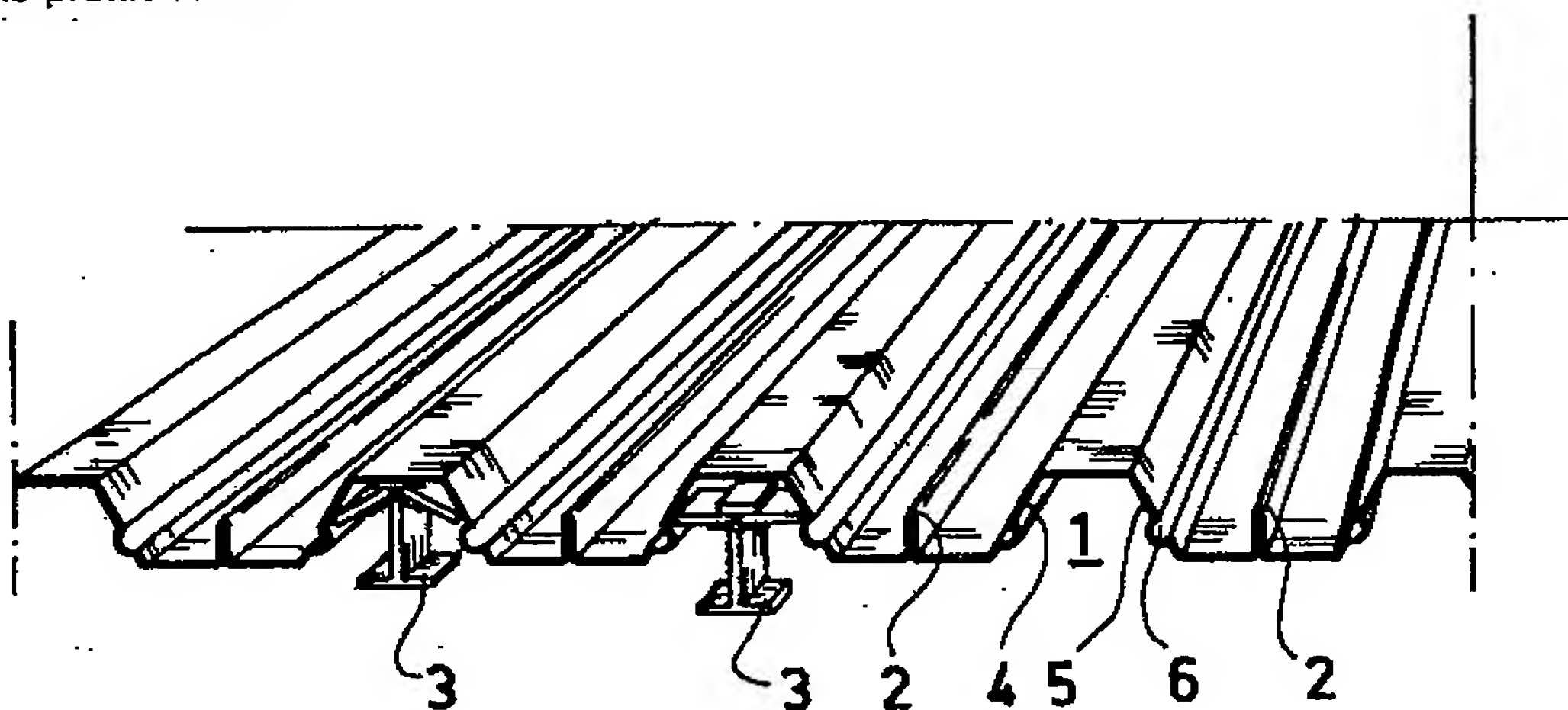
(56) Documents cited

GB 1454957	GB 0819668	EP A1 0003506
GB 0987136	EP A1 0062756	US 4453364
GB 0910110	EP A2 0033813	US 3903666

(58) Field of search
E1D
E1K
Selected US specifications from IPC sub-class E04C

(54) Trapezoidally corrugated metal sheet

(57) A compound slab section for false floors of concrete, made of sheet metal and presenting mutually parallel profile recesses (1) with substantially trapezoidal cross section which are directed upward from its plane. Characterised in that in both walls (4,5) of the profile recess, deviating from the horizontal plane, have been formed one or several grooves (6) longitudinal to the profile recess and extending over the length of the profile recess.

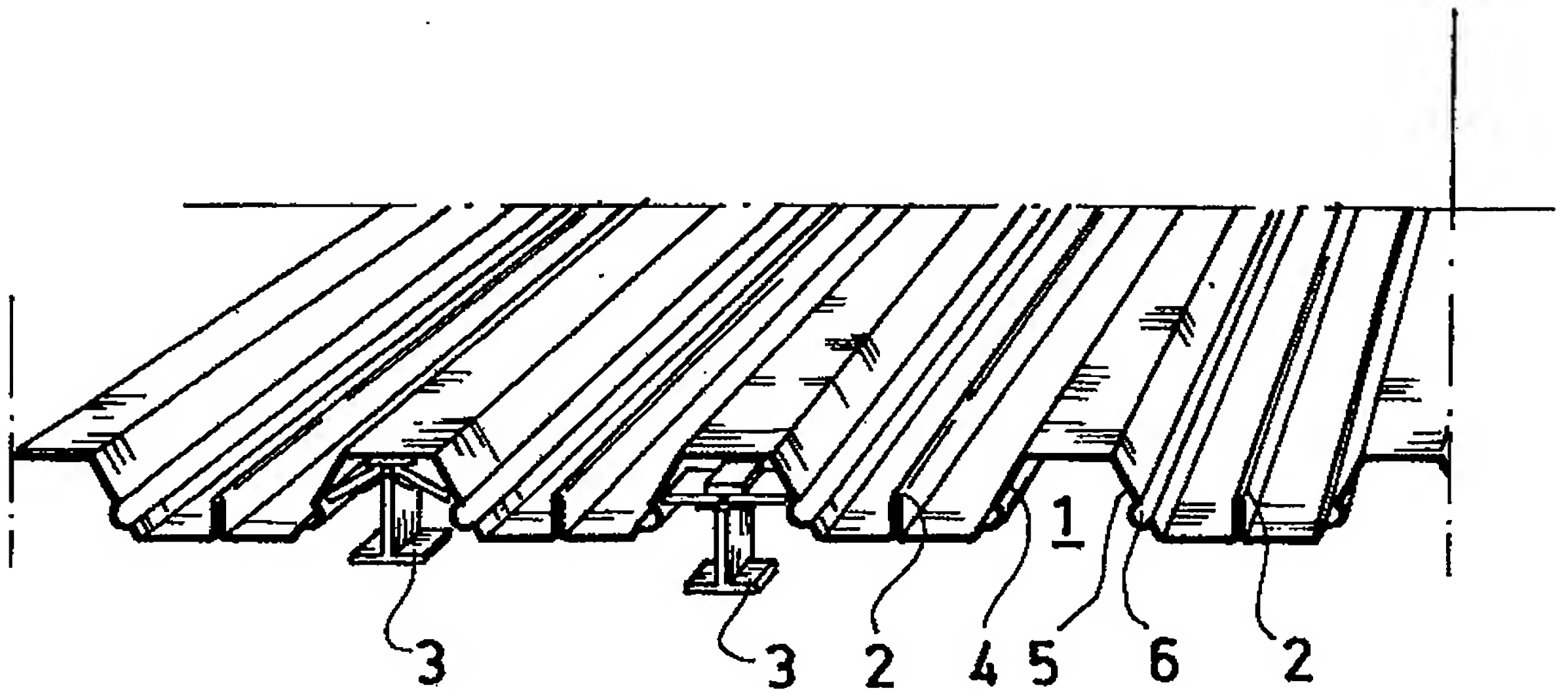


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SPECIFICATION

Compound slab selection

- 5 The present invention concerns a compound slab section for false floors of concrete, said section being made of sheet metal and presenting mutually parallel profile recesses of substantially trapezoidal cross section which
- 10 are upwardly directed from its plane.
- A compound slab section of similar kind has been disclosed in the Finnish Patent No. 57295. The compound slab section is employed when pouring concrete floors, in replacement of boarding. As the concrete hardens, the section becomes anchored thereon and it remains permanently in place. One of the advantages, compared with boarding, is that the underside propping required during
- 20 the concreting job is less space-consuming, whereby free working space is left under the slab. The section on the underside of the completed slab takes up tensile stresses, and the thickness of the slab may therefore be
- 25 reduced.
- When constructing a false floor, one places the compound slab sections side by side on rather sparsely positioned supporting beams, these beams in turn being propped against a base. The sections are tied together either
- 30 with rivets or by spot welding. After the compound slab sections have been laid down, any installation work is carried out that may be required, such as laying electric conduits and sealing the margins of passages provided
- 35 through the floor in order to prevent the concrete mix from running out through them.
- The object of the present invention is to improve even further a compound slab section of this type by facilitating, among other things, the insertion of electric conduits, which was already mentioned. The compound slab section of the invention is characterized in that in both walls of the profile recess, differing
- 45 from the horizontal plane, have been provided one or several grooves longitudinal to the profile recess and extending over the length of the profile recess.
- An advantageous embodiment of the invention is characterized in that the groove constitutes in the wall of the profile recess a projection extending into the profile recess.
- Another advantageous embodiment of the invention is characterized in that in each of the
- 55 two walls of the profile recess, deviating from the horizontal plane, has been formed one groove and that these grooves are mutually substantially similar and located on the same height.
- 60 Numerous advantages are gained with the aid of the invention. The grooves lend added rigidity to the section at the mould stage. It is easy to attach to them pipelines, advertising structures, and even shelves. The grooves
- 65 also serve as water channels in the event of

fire.

- 70 In the following, the invention is described in detail with reference to the attached drawing, wherein the figure presents, in perspective and viewed from one end, a compound slab section according to the invention.

- The compound slab section has trapezoidally shaped profile recesses 1, all of them extending upwards from the plane of the section and running parallel with each other. In the intervals of the profile recesses there are folds 2 produced of the same metal sheet, running parallel to them and pointing upwards from the plane of the compound slab section. The
- 75 top edge of the folds may be provided with downward embossed recesses (not shown in the figure), which serve as adhesion dents cooperating with the concrete.

- In the walls 4,5 of the profile recesses 1
- 85 have been formed grooves 6 of substantially semicircular shape, which extend to within the profile recesses, constituting projections. The grooves are open in the direction outward from the profile recess 1. In each wall 4,5 has been formed, close to its lower margin, one groove, both grooves on the same height so that they may be used towards suspending various kinds of supports. In the figure is shown one support 3 which has been suspended so as to be supported by the projections/grooves 6. In the figure, the support on the left has been depicted in the stage in which it has just been pushed into the profile recess 1 and the support on the right, in that
- 90 stage in which it has been pulled downwards so that it has become locked and is firmly held behind the projections 6. It is possible with the aid of such supports to suspend many kinds of imaginable accessories, e.g.
- 95 pipes, shelves, advertising structures, etc.

- 105 It is obvious to a person skilled in the art that the invention is not confined to the embodiment examples considered in the foregoing and that it may be varied within the scope of the claims following below.
- 110

CLAIMS

1. Compound slab section for false floors of concrete, made of sheet metal and presenting mutually parallel profile recesses (1) with substantially trapezoidal cross section which are directed upward from its plane, characterized in that in both walls (4,5) of the profile recess, deviating from the horizontal plane, have been formed one or several grooves (6) longitudinal to the profile recess and extending over the length of the profile recess.
- 115
2. Compound slab section according to claim 1, characterized in that the groove (6) constitutes in the wall (4,5) of the profile recess (1) a projection extending to within the profile recess.
- 120
3. Compound slab section according to claim 1 or 2, characterized in that in each of the two walls (4,5) of the profile recess (1),
- 125
- 130

deviating from the horizontal plane, has been formed one groove (6) and that these grooves are mutually substantially similar and are located on the same height.

5 4. Compound slab section according to any one of claims 1-3, characterized in that the grooves (6) are substantially semicircular.

5 5. Compound slab section as claimed in Claim 1, substantially as described herein with
10 reference to the accompanying drawing.

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